



# UNITED STATES PATENT AND TRADEMARK OFFICE

OB  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,080	02/15/2002	Feng-Wei Chen	RSW920020019US1	3477
7590	04/09/2004			
Gerald R. Woods IBM Corporation T81/503 PO Box 12195 Research Triangle Park, NC 27709			EXAMINER	TO, TUAN C
			ART UNIT	PAPER NUMBER
			3663	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/077,080	CHEN ET AL.
	Examiner Tuan C To	Art Unit 3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 03 January 2004.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-17 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8,10-14 and 16 is/are rejected.  
 7) Claim(s) 9,15 and 17 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 15 February 2002 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 2, 4-8, 10-12, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Nocek et al. (US 6587782B1).

Claims 1 and 12: The reference to Nocek et al. has been cited as disclosing some features such as claimed in the present invention. In fact, Nocek et al. teach that the geographic data base 162 (see figure 3) stores a plurality of subset data which could be the data of the first street, the other streets, and the intersections. According to Nocek et al. the intersection with its geographic location stored in the data based is determined plus the address of the first street can be found in the street data 269.

Claims 2 and 4: In Nocek et al.'s, the street geometry information originates from textual address information. For example, the point of interest may include the name of the municipality, the state of the represented interest, and the postal code.

Claim 5: As discussed in the previous paragraph, the geographic database comprises several subset data, particularly the location data of a point of intersection, the first street address.

Claim 6: As shown in figure 3, the street geometry information is retrieved from a database table.

Claim 7: As mentioned in the embodiments of Nocek et al., the geometry information is formed from the name of the point of interest, the state where the point of interest is located, and the postal code.

Claims 8 and 10: The act of comparing the obtained street geometry as recited in the claim can be seen in the act of retrieving one of the subset data as mentioned above.

Claim 11: Referring to figure 3 and figure 4 of Nocek et al, the geographic data is stored in a relational database table.

Claim 16: The navigation system of Nocek et al. includes the computer-readable media that is known as processor 112, RAM 134, Non-Volatile Memory 116, User interface 131. The computer readable media as said is similar as the computer-readable media as recited in the claims of the present invention.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nocek et al. (US 6587782B1) and in view of Ito et al. (US 6249740B1).

Claims 3 and 13: The U.S Patent No. '782 to Nocek et al. has been cited as disclosing all of the features as claimed in claim 1. However, Nocek et al. do not disclose that geographic location comprises latitude and longitude values of the intersection point. The secondary reference to Ito et al overcomes the missing feature from Nocek et al. by disclosing that the intersection position data includes the longitude and latitude values (See figure 2 (B)).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Nocek et al. to include the teaching of Ito et

al. for accurately determining the position of the vehicle in a specified region. And the geographic data has been stored along with said region may be retrieved as user's need.

Claim 14: With respect to the subject matter of claim 14, the examiner has recognized that Nocek et al do not disclose the limitation "the means for comparing the obtained street geometry further comprises means for comparing a geometric line representation of the first street to the geometric line representation of each of the one or more other street". Ito et al. has been provided as disclosing the road number of road existing intersection, for example, the road R3 and road R4 are represented by the two set of intersections (C2, C3) and (C3, C4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teaching of Nocek et al. and Ito et al. in order to display several road segments, intersections, and the related geographic data over the display device mounted on the dash board of the vehicle.

#### ***Allowable Subject Matter***

Since none of the reference has been found that teaches or fairly suggests the limitation as claims in claims 9, 15, and 17, thus they are now objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Amendment***

Applicant's amendment and arguments filed on 01/03/2004 have been fully considered but they are not deemed to be persuasive because the cited prior art still read on the claims as discussed above. Thus, the previous office action mailed on 10/04/2003 remains unchanged. The following is the reason that makes the application unpatentable.

In response to the applicant's argument that the reference to Nocek et al. fails to teach the limitations of the independent claims 1, 12, and 16, the examiner has found that Nocek et al. basically teach the claims as the following:

In Nocek et al.'s, it is found that the geographic data base 162 (Nocek et al, figure 3) stores a plurality of subset data which could be the data of the first street, the other streets, and the intersections. The geographic database do not limit the data stored in the database for the first street, but the geographic database could stores the other streets data. According to Nocek et al. the intersection with its geographic location stored in the data based is determined plus the address of the first street can be found in the street data 269. In addition, the geographic data of road segment or intersections, which have been stored in the geographic database can be read and are available for user to use on their ways. Also, according to Nocek, et al, plurality of data such as road segment data, node data are stored in the geographic database, so that the user is capable to travel to a destination by receiving the guiding instructions to the destination plus the instructions to intersections when the vehicle is in proximity with at least one intersection of a road.

The secondary reference to Ito et al. (US 6249740B1) has been cited as teaching the missing feature from Nocek et al. Ito et al. disclose the longitude and latitude data as the geographic information of the intersection points mentioned in the Nocek et al. Thus, the combination of Nocek et al. and Ito et al. would address all limitations of claims 3, 13, and 14.

For the reason discussed above, the application would not be patentable over the cited prior art.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (703) 308-6273. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and none for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

/tc

March 16, 2004



THOMAS S. BLACK  
SUPERVISORY PATENT EXAMINER  
GROUP 3600